DOCUMENT RESUME

ED 115 351 JC 760 026

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TITLE Maryland Community Colleges Student Follow-Up Study: First-Time Students, Fall 1971.
INSTITUTION Maryland State Board for Community Colleges, Annapolis.
PUB DATE Dec 75
NOTE 51p.; For the previous edition, see ED 100 475

EDRS PRICE MF-$0.76 HC-$3.32 Plus Postage
DESCRIPTORS College Environment; Data Bases; *Educational Objectives; Employment Experience; *Followup Studies; *Graduate Surveys; *Junior Colleges; Junior College Students; Research Methodology; Sampling; State Surveys; Statewide Planning; *Student Characteristics; Student Opinion; Transfer Students
IDENTIFIERS *Maryland; Non Respondent Surveys

ABSTRACT

The annual statewide student follow-up studies conducted in Maryland are designed to establish a longitudinal data base on students attending Maryland community colleges, to identify student educational objectives at the time of entry, to provide an evaluation of Maryland's community colleges, and to establish a student-to-institution information feedback process. The surveys investigate five areas: (1) student academic and demographic characteristics; (2) student goals or primary reasons for attending a community college; (3) student employment experiences; (4) student transfer experiences and performances at other postsecondary institutions; and (5) student perceptions of the community college environment and services. The first survey, conducted in 1974, covered students who were first-time community college students in fall 1970; this, the second survey, was conducted in 1975 and covers students who were first-time community college students in fall 1971. The report discusses the findings and includes tables of data, comparing the results of the first and second surveys. In addition, it describes the procedures used in administering the questionnaires and collecting the data, and details the sequential sampling techniques employed in the non-respondent survey. The survey instruments are appended. (DC)

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MARYLAND COMMUNITY COLLEGES

FOLLOW-UP STUDY: FIRST-TIME STUDENTS

FALL 1971

Report prepared by
Rodney G. Hurley
December 1975

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PREFACE

This report represents the conduct and subsequent analysis of the second Maryland Community Colleges Student Follow-Up Study. As an implementation strategy for providing evaluation of certain aspects of Maryland community college education, the Statewide student follow-up study yields vital information for use at both the institutional and system levels. As the State continues to emphasize the Executive Planning Process and the Executive Evaluation Process, assessment and evaluation of Maryland postsecondary education activities will receive increased attention, thereby increasing the importance of State-local coordinated efforts, such as the student follow-up study.

Since this study is the result of a total systemwide effort, it is important to note that it is the individual institution which has the major responsibility in conducting the study. Therefore, the State Board for Community Colleges acknowledges the institutional student follow-up study coordinators for successful completion of the study. The coordinators and their institutions are: Donald Alexander, Allegany Community College; Donald Orso, Anne Arundel Community College; William Campbell, Community College of Baltimore; Cheryl Opacinch, Catonsville Community College; Mary Johnson, Cecil Community College; Daniel Moriarity, Dundalk Community College; Irena Bronstein-Bonte, Essex Community College; C. Matthew Kelly, Frederick Community College; Jan Janssen, Garrett Community College; Richard Behrendt, Hagerstown Junior College; James D. Tschechtelin, Harford Community College; Charlene Wenckowski, Howard Community College; Robert Gell, Montgomery Community College; and Paul Larkin, Prince George's Community College.

Brent M. Johnson
Executive Director

INTRODUCTION

From its inception, the Maryland Community College Student Follow-Up Study was intended to be conducted annually for three years, after which time a cyclical time frame for administering the questionnaire would be established. Such a decision necessitated maintaining, for the three-year period, a consistent format for conducting the study and for reporting the results of the analyses.

In keeping with this requirement, this administration of the study is compatible with the *Student Follow-Up Study: First-Time Students Fall 1970* (1970 Study) with two exceptions. First, the questionnaire had some minor changes with respect to location of response items. Also, three items whose responses on the 1970 Study were questionable were deleted. Two items were added to the 1971 questionniare to ascertain both the students' high school curriculum and his or her future plans concerning educational goals. Second, through the leadership of Jim Tschechtelin, Director of Institutional Research at Harford Community College, and with the expert statistical assistance of Marinus Kip, Director of Statewide Assessment for the Maryland State Department of Education, a sequential sampling technique was designed which provided the framework for analyzing telephone surveys of nonrespondents.

The Statement of the Problem, the Objectives, the Information Requirements, the Research Questions, and much of the text of the 1971 Study are the same as the 1970 Study. The 1970 Study conducted in 1974 covered students who were first-time students in the Fall 1970 while the 1971 Study conducted in 1975 covered students who were first-time students in the Fall 1971.

STUDY OVERVIEW

Statement of the Problem

The *Statewide Master Plan for Community Colleges in Maryland 1973-1983* calls for community colleges to give increasing attention to institutional evaluation and follow-up studies of students, including those who leave prior to graduation.

According to the Master Plan, "The tremendous growth in community college enrollment has promoted a measurement of educational success in quantitative terms. While it is fair to say that size is one measure of success, it is more important that a community college be measured by the performance of its students after leaving the institution. Follow-up studies of all students attending these institutions will provide essential data for an ongoing institutional evaluation."[1]

In response to this charge, the State Board for Community Colleges in cooperation with the sixteen Maryland community colleges conducted the first in a series of student follow-up studies of all those who have entered a Maryland community college. This second study concerns those who entered for the first time in the Fall term 1971.

Objectives

The student follow-up study has four major objectives:

1. To establish a longitudinal data base on students attending Maryland community colleges;
2. To identify student educational objectives at the time of entry to a community college;

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[1] *Statewide Master Plan for Community Colleges in Maryland 1973-1983*, Maryland State Board for Community Colleges, Annapolis, Maryland, 1973, p. 92.

3. To provide student evaluation of Maryland's community colleges;

4. To establish a formal and ongoing student-to-institution information feedback process.

Considering the recent emphasis on accountability and evaluation for institutions of postsecondary education, the objective of assessing stated student educational objectives and subsequent accomplishment of those objectives is of primary importance in this study. James M. Godard notes the necessity of evaluating community colleges in terms other than degrees awarded. Specifically, he says,

> "Too often the progress of the community college in educating minority students has been measured by counting the number who receive the associate degree and the number who transfer to senior universities and secure baccalaureate degrees. It is indeed important that such information be secured and used, but there are other doors of dignified egress from the community college used by students of all ethnic and cultural backgrounds. The student who defines his career goal and moves into it at an appropriate level, the student who grows in self-concept and discovers who he is in a complex society, and the student who may leave formal education for a time to return to it later with a purpose may all be counted as evidences of success. It is this kind of follow-up which must be undertaken to appraise the work of the community college with its students and with its minority students in particular."[1]

The degree awarding and credentialing functions of educational institutions are not to be understated. However, when the nature and mission of the institution are considered, especially in the community college, other personal and educational objectives, such as taking a course of interest, become legitimate objectives. Therefore, accomplishment of stated objectives becomes the real criterion for evaluation.

Implicit in this approach is the longitudinal dimension of data collection. If an objective is defined as an accomplishable statement described by

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[1] Institute for Higher Educational Opportunity, *The Many Doors of the Community College*, Southern Regional Education Board, Atlanta, Georgia, April 1974, p. 3.

the characteristics of a target population, an expected outcome, a time frame, and a criterion for evaluation; then a system which allows for the monitoring of student progress toward his objective is necessary. More and more it becomes apparent that, "the patterns of educational progress are neither rapid nor neat."[1] Thus, allowance must be made for the student to "stop-in" and "stop-out" in pursuit of his educational objective.

Information Requirements

The objectives of this study required that information be gathered in the following areas:

For all students:

- Individual student demographic data;
- Student goals upon entering college;
- Student evaluation of community college services and environment.

For students who have transferred:

- Current student status;
- Type and location of transfer institution;
- Credit hours accepted in transfer;
- Relationship of student's community college program and transfer college program;
- Satisfaction with preparation for transfer college work;
- Academic performance at transfer institution.

For students who are or who have been employed:

- Length of employment;
- Location of employment;
- Annual salary;
- How job was located;
- Relationship of community college program to job;
- Job satisfaction index.

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[1] Elaine H. El-Khawas and Ann S. Bisconti, *Five and Ten Years After College Entry*, American Council on Education, Washington, D. C., 1974.

Research Questions

From this collected information it is suggested that the following specific questions may be addressed:

1. What were the characteristics of former students in terms of curriculum, age, race, sex, credits earned, degree status, enrollment status, overall grade-point average, and high school graduation?

2. What were the initial intentions of former students upon entry into the community college? Were these intentions carried to fruition?

3. What were the students' employment history and job satisfaction after leaving the community college? What were the relationships between their program of study at the community college and their current employment? Were they well prepared for employment?

4. Which students transferred and to where did they transfer? What was their status, both academically and enrollment-wise, upon transfer? What experiences/difficulties did they have in transferring? What were the relationships of their program of study at the community college and their major at the institution of transfer?

5. What were former students' feelings, attitudes, and opinions toward certain aspects of the community colleges' environment and services?

Study Population

The population was operationally defined to be all students who were first-time college students in Maryland's community colleges during the Fall term 1971. Included in this study were students in transfer or occupational curricula, either part-time or full-time, whether graduates or nongraduates. In all, 17,658 students were initially contained in the study population. Due to certain resource exigencies, one community college was unable to participate in the study, thereby reducing the population to 17,001 students. A total of fifteen community colleges participated (Appendix A).

PROCEDURES AND METHODOLOGIES

Instrumentation

Over a period of time, the Maryland Community College Institutional Research Group developed a follow-up instrument which addressed five study areas: general student and college information, goals upon entry to community college, employment, transfer, and satisfaction with selected aspects of the community college environment and services (Appendix B). The instrument required the institution to provide data concerning the student's curriculum, credit hours earned, graduation, highest degree earned, overall grade-point average, and current enrollment status if still enrolled. The remainder of the questionnaire requested self-responses of the student to items developed to elicit information for each of the five study areas indicated above. The questionnaire was structured to facilitate conversion of college-provided data and student response information into a keypunch format.

Questionnaire Administration and Data Collection

Since the follow-up study was a cooperative endeavor involving both the individual community colleges and the State Board for Community Colleges, the following statements describe the role of each in the printing, distribution, and collection of the instrument.

The State Board contracted for commercial printing of the questionnaire. Prior to receiving the printed forms each of the participating colleges determined the procedures they would utilize in providing the college required data. Based on the level of computer sophistication of the individual colleges, college data were supplied either through manual procedures or by computer. The most common approach involved computer printing of a mailing label containing in coded form the necessary college-provided information.

Each college produced a master control list so that respondents, nonrespondents, and undeliverables could be monitored. Since provision was made for an initial mailing, plus three subsequent waves of notices to nonrespondents, such a file eliminated, or at least minimized, duplicate mailings.

In the first mailing for the follow-up study, subjects received a letter from their institution explaining the survey, a questionnaire, and a preaddressed and stamped return envelope. At two-week intervals after the initial mailing, follow-up notices were sent to nonrespondents.

Percentage of Returns

Questionnaires were sent to 17,001 students. Questionnaires returned as undeliverable totaled 15.3 percent. Classified as undeliverable were those returned by the post office as address unknown and those returned by relatives indicating reasons for nonresponse, such as decreased and overseas military service. Eliminating such undeliverables from those assumed to have received the questionnaire, 42 percent returned usable forms.

Nonrespondent Bias

Since the 1970 Study had a low response rate (30 percent), a major effort was undertaken in the 1971 Study by the follow-up study coordinators and the State Board for Community Colleges to develop a sequential sampling procedure for allowing analyses of the nonrespondent survey. The sequential technique is fully described by Wilks in his book *Mathematical Statistics*.[1]

The nonrespondent survey and analysis system, as utilized in this study, are described by the following materials: Procedure for Sequential Sampling, Nonrespondent Interview Form, Cumulative Percent Yes Sheet (containing an

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[1] Samuel S. Wilks, *Mathematical Statistics*, John Wiley and Sons, New York, 1962, pp. 472-498.

example), and Cumulative Percent Yes Sheets (blank). All are contained in Appendix B.

Briefly, the sequential sampling technique involves matching the distribution of percent "yes" and percent "no" response by the respondent group and the nonrespondent group to a selected item. To accomplish this "matching", the distribution of responses by the respondents (represented by a percentage "yes" response) is graphically represented. Above and below this constant line tolerance limits are established. Then, nonrespondents are selected through use of a random numbers table. The responses are plotted on the same graph as the respondents to see if the distribution converges within the tolerance limits toward the respondent distribution.

This convergence technique is an approach which is characterized by efficiency and practicality. To substantiate the results of the sequential sampling technique, two procedures could be utilized. A chi-square test could be done to test for differences between respondents and nonrespondents. Also, the sampling error associated with the nonrespondent sample could be determined to find the probability that sample nonrespondents truly represents the total nonrespondent group.

Seven community colleges, accounting for 79.8 percent of the study population, were able to implement the nonrespondent system. The results of the nonrespondent system permit describing response in terms of respondents, nonrespondents, and the entire study population. The analyses of the nonrespondent system are included in the appropriate sections of the chapter "Results."

Data Processing

Upon receipt of returned questionnaires, each college forwarded to the State Board for Community Colleges at preestablished dates questionnaires received by them as of that date. The State Board then prepared the questionnaires

for keypunching. The keypunching, verifying, and computer analyses were done at the University of Maryland College Park Computer Science Center.

From the computer analyses, the following information and outputs were generated and have been provided to the participating colleges: individual institutional printouts, Statewide aggregate data printouts, and individual institutional punched card data decks. The format of these printouts provided the basis for analysis and description of the personal and demographic characteristics of former students, their community college academic success, post-college activities, employment activities and job satisfaction, and their assessment of the colleges' services and environment.

RESULTS

The multiplicity of academic and administrative developments over the last ten years (e.g., enrollment growth, open admissions, PPBS/MIS, evaluation and accountability) in postsecondary education has brought increased activities and emphasis on research about the community college and its student population. Since 1968 a majority of studies in the literature have reflected increased awareness of the diverse nature of the community college student. No longer can the community college student be characterized as the traditional transfer student. The distribution of community college students over the continuum or scale of a given characteristic must be studied and described so that a body of information may be developed. This study had as a major objective the establishment of a longitudinal data base consisting of descriptions of the characteristics of community college student population.

Age and High School Graduation Data

Since first-time students are a subset of the total community college population, it is important to look at the degree of differences with respect to the same characteristics of the total community college population and the study group. Table 1 shows that the 1971 respondent group percentage distributions for the characteristics of curriculum, enrollment status, sex, and race represent increases over the 1970 group for occupational programs, part-time students, females, and blacks. These percent changes in the respondent groups are of a similar magnitude as the increases in these characteristics for the total community college population for 1970 and 1971.

With respect to age, the distribution for respondents in 1971 and 1970 is very similar except that there is a slightly larger percentage of 16-22 year olds in the 1971 group (Table 2). Also, as was the case for the 1970 group, the

the 1971 group had a significant percentage of students who were prior year high school graduates or GED recipients. These data continue to indicate that the community colleges are receiving increased demands for a diversity of instructional programs, particularly in terms of scheduling, flexibility, and focus of offerings (Table 3).

TABLE 1. Percentage Distribution of the Characteristics of Curriculum, Enrollment Status, Sex, and Race by Total Community College Population and Respondent Group.

Characteristic	Total Community College Population		Respondent Group	
	1971 %	1970 %	1971 %	1970 %
Curriculum:				
Transfer	75.1	92.0	67.2	75.6
Occupational	24.9	8.0	32.8	24.4
Enrollment Status:				
Part-time	48.6	42.0	38.4	33.8
Full-time	51.4	58.0	61.6	66.2
Sex:				
Male	58.2	56.0	50.2	48.7
Female	41.8	44.0	49.8	51.3
Race:				
White	84.3	88.1	88.5	89.5
Black	12.2	9.9	9.7	7.5
Other	3.5	2.0	1.8	3.0

TABLE 2. Distribution of Respondents by Age.

Age (Years)	1971 Number	1971 Percent	1970 Number	1970 Percent
16-22	3912	72.5	2877	69.2
23-27	454	8.4	435	10.4
28-32	323	6.0	229	5.5
33-37	230	4.3	220	5.3
38-42	189	3.5	157	3.8
43-60	282	5.2	236	5.7
61-Over	4	0.1	6	0.1
Total	5394	100.0	4160	100.0

Table 3 also indicates a slight growth to 1971 in the percentage of students who were first-time ever college students that were, in fact, high school seniors taking advantage of early college plans.

TABLE 3. Distribution of Respondents by Year of High School Graduation.

Year of Graduation	1971		1970	
	Number	Percent	Number	Percent
1972	118	2.2	-	-
1971	3079	58.3	65	1.6
1970	323	6.1	2285	55.6
1969	174	3.3	223	5.4
1968	131	2.5	112	2.7
1967	117	2.2	65	1.6
1966	109	2.1	95	2.3
1965	118	2.2	93	2.3
1964-Before	1109	21.1	1159	28.5
Total	5278	100.0	4097	100.0

High School Curriculum, Program Area, Credit Hours Earned, Graduation Status, Highest Degree Received, Cumulative Grade-Point Average

An item on the 1971 survey which was not included in the 1970 study yielded data showing that 32.2 percent of the 1971 respondents had a high school curriculum other than college preparatory (Table 4). This finding is of particular significance since 32.8 percent of the 1971 respondents exited from community college in other than a transfer program (Table 5). A crosstabulation of high school curriculum and community college program indicates that for those students who were in a college preparatory high school program, 26.7 percent exited from community college in a non-transfer program (Table 6).

Such a demonstration of the similarity of demand by students for high school curriculum and community college programs intensifies the need for greater articulation of secondary and postsecondary occupational program offerings. This need is further supported by the fact that 74 percent of the 1971 respondents went to high school in the same county or city as the location of the community college (Table 7).

TABLE 4. Distribution of Respondents by Type of High School Curriculum.

High School Curriculum	Number	Percent
College Preparatory	3662	67.8
Agriculture	29	0.5
Distributive Education	396	7.3
Health Occupations	62	1.1
Home Economics	36	0.7
Business & Office Education	885	16.4
Industrial Arts	73	1.4
Technical Education	142	2.6
Trade & Industrial Occupations	121	2.2
Total	5406	100.0

TABLE 5. Distribution of Respondents by Program Area.

Program Area	1971 Number	1971 Percent	1970 Number	1970 Percent
Transfer	3807	67.2	3191	75.6
Business & Commerce Technologies	603	10.6	371	8.8
Data Processing Technologies	159	2.8	118	2.8
Health Related Technologies	462	8.2	237	5.6
Engineering Related Technologies	200	3.5	138	3.3
Natural Science Technologies	25	0.4	7	0.2
Public Service Technologies	411	7.3	161	3.7
Total	5667	100.0	4223	100.0

TABLE 6. Crosstabulation of Respondents by Community College Program and High School Curriculum.

	High School Curriculum									
Program Area	College Preparatory	Agri-culture	Distributive Education	Health Occupations	Home Economics	Business & Office Education	Industrial Arts	Technical Education	Trade & Industrial Occupations	Total
Transfer	2620	19	268	21	23	512	43	72	57	3635
Business & Commerce Technologies	296	1	33	4	2	200	6	8	22	572
Data Processing Technologies	86	1	13	-	-	34	1	15	3	153
Health Related Technologies	305	-	24	36	6	60	1	5	8	445
Engineering Related Technologies	109	1	12	-	-	5	14	32	16	189
Natural Science Technologies	23	1	-	-	-	1	-	-	-	25
Public Service Technologies	223	6	46	1	5	73	8	10	15	387
Total	3662	29	396	62	36	885	73	142	121	5406

TABLE 7. Distribution of Respondents by Location of High School Attended.

High School Location	1971 Number	1971 Percent
Same County/City as this Community College	4072	74.0
Other Maryland County	558	10.1
Non-Maryland	874	15.9
Total	5504	100.0

In the 1970 group, 37.5 percent were reported to have amassed more than enough credit hours for graduation. Similarly, the 1971 group had 29.5 percent with excess credit hours for graduation (Table 8). The size of the percentages are partially explained by the fact that several community college programs in the system require more than the customary sixty semester hours. Therefore, these percentages would probably be substantially reduced by controlling for credit hour requirements of individual programs at each community college. These large percentages are attributable in part to the fact that students with degrees earned and large amounts of credits amassed at other institutions transfer to community colleges. If recognition of these credits are extended by the community colleges, then it could appear that a problem does exist.

TABLE 8. Distribution of Respondents by Credit Hours Earned.

Credit Hours Earned	1971 Number	1971 Percent	1970 Number	1970 Percent
0	400	7.1	121	3.3
1-3	414	7.3	219	5.9
4-6	358	6.3	206	5.6
7-11	358	6.3	222	6.0
12-15	324	5.7	220	6.0
16-30	862	15.2	494	13.4
31-45	611	10.8	398	10.8
46-60	668	11.8	423	11.5
61-75	1254	22.1	962	26.0
76-90	74	1.3	47	1.3
90-Above	344	6.1	374	10.2
Total	5667	100.0	3686	100.0

The distribution of respondents by highest community college degree or award received reveals a small decrease in the percentage of respondents from the 1970 Study to the 1971 Study who had received an associate of arts degree (Table 9). When looking at the crosstabulation of respondents by highest degree or award received and program area, the data show that while 66.9 percent of all associate of arts degrees were in a transfer program for the 1970 group, only 55.5 percent of the associate of arts degrees were in a transfer program for the 1971 group (Table 10). These data are consistent with the shift in program enrollment from transfer to occupational noted earlier in this discussion.

TABLE 9. Distribution of Respondents by Highest Degree or Award Received.

Highest Degree or Award	1971 Number	1971 Percent	1970 Number	1970 Percent
Associate of Arts	1262	22.4	878	25.4
Certificate	73	1.3	65	1.9
Diploma	48	0.9	91	2.6
Other	576	10.2	66	1.9
None	3678	65.2	2355	68.2
Total	5637	100.0	3455	100.0

TABLE 10. Crosstabulation of Respondents by Highest Degree or Award Received and Program Area.

	Associate of Arts				Certificate			
	1971		1970		1971		1970	
Program Area	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Transfer	701	55.5	587	66.9	19	26.0	44	69.8
Business	166	13.2	84	9.6	6	8.2	9	14.3
Data Processing	45	3.6	35	4.0	6	8.2	1	1.6
Health	201	15.9	97	11.0	19	26.0	7	11.1
Engineering	45	3.6	39	4.4	5	6.9	2	3.2
Natural Science	10	0.8	3	0.3	-	-	-	-
Public Service	94	7.4	33	3.8	18	24.7	-	-
Total	1262	100.0	878	100.0	73	100.0	63	100.0

As indicated by Table 11, very little change is evident between the distribution of grade-point averages for the 1971 and 1970 groups. Whereas there were three program areas in the 1970 group with more than 20 percent of the respondents with less than a 2.00 cumulative grade-point average, only the Health area had fewer than 20 percent of the students with less than a satisfactory grade-point average for the 1971 group (Table 12).

TABLE 11. Distribution of Respondents by Cumulative Grade-Point Average Attained at the Community College.

Grade-Point Average	1971		1970	
	Number	Percent	Number	Percent
0.00-1.99	1273	22.5	770	21.4
2.00-2.49	1164	20.5	793	22.0
2.50-2.99	1297	22.9	805	22.4
3.00-3.49	1110	19.6	736	20.5
3.50-Above	823	14.5	495	13.7
Total	5667	100.0	3599	100.0

TABLE 12. Crosstabulation of Respondents by Cumulative Grade-Point Average and Program Area.

Program Area	Cumulative Grade-Point Average										Total	
	Up to 1.99		2.00-2.49		2.50-2.99		3.00-3.49		3.50-Above			
	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970
Transfer	860	443	750	586	835	568	741	570	591	476	3777	2643
Business & Commerce Technologies	152	64	143	67	130	78	118	58	55	31	598	298
Data Processing Technologies	39	31	30	20	39	29	32	22	18	9	158	111
Health Related Technologies	63	25	109	61	126	59	101	39	63	15	462	199
Engineering Related Technologies	61	41	41	29	49	35	30	17	19	9	200	131
Natural Science Technologies	9	2	5	2	5	-	3	2	3	1	25	7
Public Service Technologies	89	22	86	43	113	31	85	21	37	7	410	124
Total	1273	628	1164	808	1297	800	1110	729	786	548	5630	3513

Tables 13 through 15 show the crosstabulation of program area with enrollment status, sex, and race. Table 15 evidences a move toward larger occupational program enrollments since both black and white student percentages in occupational programs increased from the 1970 to 1971 group. Specifically, for the 1971 group, 51 percent of the black students and 31 percent of the white students were

classified as occupational; and for the 1970 group, 34 percent of the black students and 25 percent of the white students were enrolled in occupational programs.

TABLE 13. Crosstabulation of Respondents by Enrollment Status and Program Area.

Program Area	Enrollment Status: Current Enrolled 1971	Current Enrolled 1970	Not Currently Enrolled 1971	Not Currently Enrolled 1970	Total 1971	Total 1970
Transfer	445	272	3345	2239	3790	2511
Business & Commerce Technologies	86	40	508	249	594	289
Data Processing Technologies	23	13	136	103	159	116
Health Related Technologies	87	53	372	149	459	202
Engineering Related Technologies	26	23	174	114	200	137
Natural Science Technologies	4	1	21	6	25	7
Public Service Technologies	94	35	316	95	410	130
Total	765	437	4872	2955	5637	3392

TABLE 14. Crosstabulation of Respondents by Sex and Program Area.

Program Area	Sex: Male 1971	Male 1970	Female 1971	Female 1970	Total 1971	Total 1970
Transfer	1879	1465	1780	1449	3659	2914
Business & Commerce Technologies	241	128	326	228	567	356
Data Processing Technologies	106	65	50	49	156	114
Health Related Technologies	54	16	367	216	421	232
Engineering Related Technologies	178	131	7	5	185	136
Natural Science Technologies	5	6	5	1	10	7
Public Service Technologies	249	98	154	60	403	158
Total	2712	1909	2689	2008	5401	3917

TABLE 15. Crosstabulation of Respondents by Race and Program Area.

Program Area	Race: White 1971	White 1970	Black 1971	Black 1970	Oriental 1971	Oriental 1970	Spanish Surnamed 1971	Spanish Surnamed 1970	American Indian 1971	American Indian 1970	Other 1971	Other 1970	Total 1971	Total 1970
Transfer	3378	2593	265	192	19	30	15	23	5	13	26	29	3708	2880
Business & Commerce Technologies	501	328	83	18	2	1	4	1	1	-	1	2	592	350
Data Processing Technologies	133	98	19	14	4	1	1	-	-	1	-	1	157	115
Health Related Technologies	376	195	70	31	2	3	3	-	2	1	-	2	453	232
Engineering Related Technologies	174	124	15	11	1	1	1	1	1	-	3	-	195	137
Natural Science Technologies	22	7	1	-	1	-	-	-	-	-	-	-	24	7
Public Service Technologies	313	133	86	23	-	-	1	1	1	-	2	1	403	158
Total	4897	3478	539	289	29	36	25	26	10	15	32	35	5532	3879

Educational Goals

A major purpose of this study was to provide a way of assessing student success with other than the traditional measures of graduation and grade-point average. This study allowed the student to state his or her educational objective upon entry to the community college and further made provision for the student to state whether or not he or she had accomplished this objective. The identification of educational objectives upon entry to the community was intended to lead to a more accurate definition of "dropouts."

Previous research had purported to show that approximately 50 percent of community college students were dropouts. Using as dropouts those student who left the institution prior to graduation, these studies have produced both misleading and damaging perceptions of the community college student population.

Student follow-up studies recently completed in Florida and Virginia assessed student success in terms of the realization of stated educational objectives. The results of the Florida study indicate that "if the word 'dropouts' is redefined to include only those students who have not reached their educational goals after three years from the time they entered a community college and who have no plans to complete these goals, the percentage of 'dropouts' is less than two percent."[1] The Virginia study reported that "two of three former students who were nongraduates indicate that they intend to return to a community college for additional work."[2] This study was concerned only with former occupational students.

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1 Florida Community Junior College Inter-Institutional Research Council *Follow-Up Study of First-Time Fall 1970 Students*, as reported in *IRC NEWS & NOTES*, Gainesville, Florida, Fall 1973.

2 David R. Eyler, *Post-College Activities of Former Occupational-Technical Students*, Virginia Department of Community Colleges, Richmond, Virginia, 1974, p. 28.

The distribution of respondents in the Maryland study in terms of self-reported educational goals upon entry to the community college is shown in Table 16. These data indicate that 55.0 percent of the respondents stated or implied an educational goal of Transfer (A.A.-Transfer and Liberal Arts-Transfer). This is different from the 67.2 percent who were classified as exiting in a transfer curriculum. Two explanations can be offered. First, the diversity of program offerings was not as great in 1971 as it is currently. Second, although many students did not have transfer as a goal, they were nevertheless classified as transfer because they did not specifically state a definite program area.

TABLE 16. Distribution of Respondents by Educational Goal upon Entry to the Community College.

Educational Goal	1971		1970	
	Number	Percent	Number	Percent
Associate of Arts-Transfer	2137	38.8	1253	31.9
Associate of Arts-No Plans	823	15.0	583	14.9
Certificate or Diploma	456	8.3	252	6.4
Special Training Program	563	10.2	561	14.3
Liberal Arts, Some Courses then Transfer	890	16.2	858	21.9
Liberal Arts, Courses of Interest, No Plans	635	11.5	416	10.6
Total	5504	100.0	3923	100.0

Compared to the 1970 respondent group, there was a decrease of 9.1 percentage points in those who responded positively in 1971 as having achieved their stated educational objective (Table 17). In the 1970 Study, no provision was made for determining future intentions of respondents with respect to their educational objectives. Table 18 shows the distribution of the 1971 group as they perceive their future educational activities as related to their stated educational goal upon entry to the college. The data indicate that approximately 20 percent of the group have no plans to complete their objective.

TABLE 17. Distribution of Respondents by Educational Goal Achievement.

Goal Achievement	1971		1970	
	Number	Percent	Number	Percent
Interest Achieved	2729	51.2	2189	60.3
Interest Not Achieved	2599	48.8	1441	39.7
Total	5328	100.0	3630	100.0

TABLE 18. Distribution of Respondents by Status of Educational Goal Pursuit.

Educational Goal Status	1971	
	Number	Percent
No Plans	757	19.9
Still Pursuing	1554	40.8
Hope to Continue	1495	39.3
Total	3806	100.0

Results from the nonrespondent survey show that for the seven colleges completing the survey, six institutions found the distribution of nonrespondents, with respect to the item on achieving objective, to be within the 10 percent tolerance limits of the respondent group distribution. The seventh college was unable to survey a sufficient number of nonrespondents as required by the convergence design. Based on the evidence above, it is felt that were the other colleges capable of implementing the nonrespondent system, they would have found similar results.

A crosstabulation of the 1971 group for educational goal by interest achievement by educational goal pursuit is displayed in Table 20. These data with those in Table 19 indicate that of those respondents who stated an educational goal and had not achieved that goal, 82 percent in the transfer goal area (A.A. Transfer and Liberal Arts Transfer) are either still pursuing or plan to continue pursuit of the goal at a later date. The percentages for the other

goal areas of those still pursuing or planning pursuit at a later date are: A.A. No Immediate Plans, 27 percent; Certificate, Diploma, or Upgrade Skills, 82 percent; Special Training Program, 68 percent; Liberal Arts, courses of interest no further plans, 82 percent.

TABLE 19. Crosstabulation of Respondents' Primary Reason for Attending by Interest Achievement.

Educational Goal	Interest Achievement Yes	No
A.A. then Transfer	325	1062
A.A. No Immediate Plans	111	391
Certificate, Diploma or Upgrade Skills	56	276
Special Training Program	130	241
Liberal Arts Courses then Transfer	297	195
Liberal Arts, Courses of Interest, No Further Plans	155	281
Total	1074	2446

TABLE 20. Crosstabulation of Respondents' Primary Reason for Attending by Status of Educational Goal Pursuit by Interest Achievement.

Interest Achievement / Educational Goal	Educational Goal Pursuit: No Plans	Still Pursuing	Hope to Continue Later
A.A. then Transfer	188	364	510
A.A. No Immediate Plans	89	121	181
Certificate, Diploma or Upgrade Skills	51	67	158
Special Training Program	77	49	115
Liberal Arts Courses then Transfer	29	66	100
Liberal Arts, Courses of Interest, No Further Plans	52	62	167
Total	486	729	1231

Table 21 shows both the success of respondents in achievement of educational objectives and the future plans of those who have not accomplished their objectives. The results are presented by race and sex.

TABLE 21. Crosstabulation of Respondents' Primary Reason for Attending by Interest Achievement Controlling for Sex, Race, and Status of Educational Goal Pursuit.

	No Plans								Hope to Continue at A Later Date								Still Pursuing							
	White				Black				White				Black				White				Black			
	Male		Female		Male		Female		Male		Female		Male		Female		Male		Female		Male		Female	
Educational Goal	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
A.A. then Transfer	11	112	13	58	2	3	-	4	12	248	15	163	1	23	3	42	139	87	95	103	10	30	13	19
A.A. No Immediate Plans	17	31	32	48	-	1	1	3	6	83	13	57	-	8	6	21	7	44	15	44	1	6	3	13
Certificate, Diploma or Upgrade Skills	12	21	4	25	-	1	-	1	8	58	8	59	-	8	3	20	5	33	4	21	5	3	3	5
Special Training Program	13	30	30	36	-	2	1	-	10	30	16	56	1	10	1	10	13	16	23	21	4	3	2	5
Liberal Arts Courses then Transfer	23	15	13	10	-	1	1	-	10	56	9	24	1	7	2	2	92	37	116	14	3	3	5	1
Liberal Arts, Courses of Interest, No Further Plans	14	23	32	25	-	1	1	-	11	51	36	90	3	4	7	9	14	22	26	31	-	2	2	-
Total	90	232	124	202	2	9	4	8	57	526	97	449	6	60	22	104	270	343	279	234	23	47	28	43

Tables 22 and 23 show the distribution of respondents by program area and educational goal upon entry. Again, as was the case for the 1970 group, program area is really based on exiting curriculum rather than entry classification. The ratios of respondents by sex and race within educational goal show little difference between the 1971 and 1970 groups.

TABLE 22. Crosstabulation of Respondents by Educational Goal upon Entry to the Community College and Program Area.

	Educational Goal												
	A.A. then Transfer		A.A. No Immediate Plans		Certificate, Diploma, or Upgrade Skills		Special Training Program		Liberal Arts Courses then Transfer		Liberal Arts, Courses of Interest, No Further Plans		Total
Program Area	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971 1970
Transfer	1581	992	237	284	271	176	275	331	813	785	517	354	3694 2922
Business & Commerce Technologies	179	74	189	113	72	32	67	79	22	32	57	28	586 358
Data Processing Technologies	50	38	55	36	12	17	17	14	9	5	13	9	156 114
Health Related Technologies	80	41	184	76	28	15	128	77	11	8	15	13	446 228
Engineering Related Technologies	62	42	63	40	22	11	23	31	12	11	14	3	196 137
Natural Science Technologies	10	3	10	3	-	-	4	1	-	-	1	-	25 7
Public Service Technologies	175	63	85	31	51	6	49	27	23	17	18	9	401 153
Total	2137	1253	823	583	456	249	563	560	890	858	635	416	5504 3919

TABLE 23. Crosstabulation of Respondents by Race by Educational Goal upon Entry to the Community College by Sex.

Educational Goal	Race													
	White		Black		Oriental		Spanish Surnamed		American Indian		Other		Total	
	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970
Associate of Arts - Transfer														
Male	1070	655	105	51	5	3	7	2	1	2	8	10	1196	703
Female	711	462	108	44	4	3	2	3	3	-	2	3	830	515
Associate of Arts - No Plans														
Male	282	203	25	11	1	-	1	1	-	-	2	2	311	217
Female	375	293	68	36	2	4	1	2	1	1	1	1	448	337
Certificate or Diploma														
Male	181	73	23	8	2	3	-	1	-	-	2	1	208	86
Female	169	82	48	22	1	2	1	5	-	-	-	1	219	112
Special Training Program														
Male	166	191	23	16	2	2	1	2	-	-	1	1	193	212
Female	275	271	38	36	1	2	3	1	1	2	2	1	320	313
Liberal Arts - Transfer														
Male	423	439	21	15	2	5	3	2	1	-	6	6	456	467
Female	347	325	15	17	2	1	2	1	-	2	3	6	369	352
Liberal Arts - No Plans														
Male	203	124	12	10	-	-	-	1	-	1	2	2	217	138
Female	342	248	28	16	4	2	2	-	1	2	1	-	378	268
Total	4544	3366	514	262	26	27	23	21	8	10	30	34	5145	3720

Employment

Responses from the employment section of the questionnaire indicate that 73 percent of the respondents were employed. Of those who reported employment, over three-fourths were currently employed on a full-time basis.

TABLE 24. Distribution of Respondents by Current Employment Status.

Current Employment Status	1971		1970	
	Number	Percent	Number	Percent
Part-time	963	23.4	623	22.4
Full-time	3155	76.6	2164	77.6
Total	4118	100.0	2787	100.0

Results of the nonrespondent survey indicate that five of the seven colleges completing the survey found the nonrespondent distribution within the 10 percent acceptance limits of the respondent distribution. For the other two colleges, both found the percentage of nonrespondents employed either part-time or full-time to be greater than the 10 percent upper limit of the respondent distribution.

Over four-fifths (83.3 percent) of the employed respondents reported employment in Maryland, either in the same locality as the community college or in another Maryland county (Table 25).

TABLE 25. Distribution of Respondents by Location of Current Employment.

Current Employment Location	1971		1970	
	Number	Percent	Number	Percent
Same as this community college	2191	54.7	1462	52.9
Other Maryland county	644	16.1	384	13.9
Baltimore City	499	12.5	377	13.7
Washington, D. C.	279	7.0	216	7.8
Delaware	18	0.4	11	0.4
Pennsylvania	82	2.0	65	2.4
Virginia	75	1.9	57	2.1
West Virginia	23	0.6	19	0.7
Other Non-Maryland	193	4.8	169	6.1
Total	4004	100.0	2760	100.0

Comparing initial salary levels and current salary levels as reported by the respondents, the data show that upon leaving the community college 92.6 percent had salaries under $10,000 compared to 66.1 percent currently indicating salaries less than $10,000 (Tables 26 and 27). These distributions are very similar to those for the 1970 group. Again, as was the case with the 1970 group the number of students who have transferred to other educational institutions and who are working part-time will tend to inflate these categories.

The data show employed respondents who had transferred to another institution were largely in the lower salary ranges for both initial salary and present salary. Since employed respondents who transferred comprise over 20 percent of the employed respondents, their accumulation in the lower salary ranges has the effect of reducing both the mean and median salaries of the employed respondents.

TABLE 26. Distribution of Respondents by Initial Salary Levels of Employment upon Leaving the Community College.

Initial Salary Level	1971		1970	
	Number	Percent	Number	Percent
Below - $5,999	1303	48.7	1554	63.9
$6,000 - $6,999	372	13.9	268	11.0
$7,000 - $7,999	277	10.4	187	7.7
$8,000 - $8,999	210	7.9	150	6.2
$9,000 - $9,999	167	6.2	93	3.8
$10,000 - $10,999	136	5.1	70	2.9
$11,000 - $11,999	48	1.8	25	1.0
$12,000 - $12,999	58	2.2	24	1.0
$13,000 - $13,999	14	0.5	11	0.4
$14,000 - $14,999	17	0.6	10	0.4
$15,000 - $15,999	13	0.5	11	0.4
$16,000 - $16,999	11	0.4	10	0.4
$17,000 - $17,999	4	0.1	6	0.3
$18,000 - $18,999	14	0.5	4	0.2
$19,000 - $19,999	2	0.1	1	-
$20,000 - Above	29	1.1	10	0.4
Total	2675	100.0	2434	100.0

TABLE 27. Distribution of Respondents by Present Salary Levels of Current Employment

Present Salary Level	1971		1970	
	Number	Percent	Number	Percent
Below - $5,999	678	23.5	626	24.3
$6,000 - $6,999	289	10.1	248	9.7
$7,000 - $7,999	379	13.2	298	11.6
$8,000 - $8,999	300	10.4	269	10.5
$9,000 - $9,999	255	8.9	172	6.7
$10,000 - $10,999	291	10.1	211	8.2
$11,000 - $11,999	166	5.8	91	3.6
$12,000 - $12,999	175	6.1	82	3.2
$13,000 - $13,999	90	3.1	33	1.3
$14,000 - $14,999	65	2.3	118	4.6
$15,000 - $15,999	61	2.1	127	5.0
$16,000 - $16,999	22	0.8	19	0.7
$17,000 - $17,999	18	0.6	10	0.4
$18,000 - $18,999	19	0.7	14	0.6
$19,000 - $19,999	9	0.3	7	0.2
$20,000 - Above	58	2.0	240	9.4
Total	2875	100.0	2565	100.0

One of the increasing concerns for community colleges is their job placement function. When asked to indicate the method utilized in locating their job upon leaving the community college, only 4.0 perc[illegible] reported the college faculty or the college placement office. After removing those respondents who had held their current job while in college, the percentage of those using either the faculty or the placement office was only 6.0 percent (Table 28). This low utilization is not uncommon in community colleges and, as such, is receiving increased attention.

TABLE 28. Distribution of Respondents by Method of Locating Employment upon Leaving the Community College.

	1971			1970		
Method of Job Location	Number	Percent	Adjusted* Percent	Number	Percent	Adjusted* Percent
Faculty of College	112	3.0	4.6	56	2.2	3.4
College Placement Office	38	1.0	1.5	24	0.9	1.5
Employment Agency	112	3.0	[illegible].6	103	4.0	6.3
Family or Friend	880	23.6	3[illegible].7	578	22.1	35.3
Newspaper	405	10.9	16.[illegible]	-	-	-
Held Job while at Community College	1265	33.9	-	972	37.2	-
Other	918	24.6	37.2	876	33.6	53.5
Total	3730	100.0	100.0	2609	100.0	100.0

* Removing those who held jobs while at the community college.

Recognizing the existence of this condition, the State Board for Community Colleges has applied for and received funding from the Maryland Division of Vocational-Technical Education to advance the functions of career development, guidance, counseling, and placement in the community college.

Table 28 shows the addition in the 1971 survey of the response choice of "newspaper" for the item concerning method of job location. In the 1970 group 53.5 percent selected the response "other." The inclusion of "newspaper" for the 1971 group allowed the "other" group to be reduced by 16.4 percent to 37.2 percent.

While the 1970 group did not indicate the general level of dissatisfaction

with aspects of employment that are existent nationwide, the 1971 group showed even higher levels of job satisfaction.

TABLE 29. Distribution of Respondent Satisfaction with Aspects of Current Employment.

	Aspects of Employment													
	Salary		Salary Increase Opportunities		Advancement and Opportunities		Job Enjoyment		Fringe Benefits		Job Importance		Communications with Superiors	
Levels of Satisfaction	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970
Highly Satisfied	799	507	1016	623	950	899	1468	954	1513	1004	1564	898	1626	1112
Satisfied	1296	714	1109	638	992	530	1230	731	1047	657	1136	755	1156	685
Reserved	1183	1037	910	704	917	709	713	742	635	588	691	690	592	480
Dissatisfied	[illegible]	351	419	670	502	429	260	419	287	282	244	270	231	557
Highly Dissatisfied	353	270	445	473	544	540	271	264	419	338	301	243	322	269
Total	3935	2879	3899	3108	3905	3107	3942	3110	3901	2869	3936	2856	3927	3103

Possible explanations of this positive job satisfaction might be reflected in Table 30. The data in Table 30 show that 62.8 percent of the respondents have been in their current employment for a period of two years or less. Further, in replying to the item, "Have you changed jobs between the time you left the community college and March 1975?" 44.7 percent of the respondents indicated they had recently changed employment.

TABLE 30. Distribution of Respondents by Length of Time in Current Employment.

	1971		1970	
Length of Current Employment	Number	Percent	Number	Percent
Less than one year	1199	29.5	958	34.5
One to two years	1354	33.3	860	30.9
Three to five years	863	21.2	581	20.9
Six to ten years	372	9.2	232	8.3
Eleven or more years	277	6.8	150	5.4
Total	4065	100.0	2781	100.0

Table 31 reveals two very interesting aspects of the respondents' perceived value of their community college program in relation to selected job dimensions. In particular, of those who responded in either the "related" or the "not related" categories, 67.7 percent said that their community college program enhanced their understanding of the theoretical skills required for their job;

and 63.6 percent indicated the community college program increased their abilities to perform the skills required for their job.

TABLE 31. Distribution of Respondents' Statement of Relationship of Certain Job Dimensions and their Community College Program.

Job-Program Relationship	Enhanced Theoretical Skills				Enhanced Abilities to Perform			
	1971		1970		1971		1970	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Related	1884	47.1	1181	38.0	1804	45.2	1476	47.8
Not Related	897	22.4	1116	35.9	1033	25.9	844	27.4
Not Applicable	1218	30.5	811	26.1	1156	28.9	765	24.8
Total	3999	100.0	3108	100.0	3993	100.0	3085	100.0

Job-Program Relationship	Enhanced Opportunities to Get A Job				Enhanced Salary and Promotion Opportunities			
	1971		1970		1971		1970	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Related	928	23.7	646	23.1	890	22.7	569	20.6
Not Related	1617	41.3	1263	45.2	1606	41.1	1319	47.8
Not Applicable	1373	35.0	885	31.7	1416	36.2	870	31.6
Total	3918	100.0	2794	100.0	3912	100.0	2758	100.0

On the other hand, only 36.5 percent and 35.7 percent respectively of the respondents said that the community college program enhanced their opportunities to get a job and that the community college program enhanced their opportunities for salary increases and promotions. Overall, 55.2 percent of the respondents indicated that their community college program and their job was either directly or somewhat related (Table 32).

TABLE 32. Distribution of Respondents' Statement of the Relationship of their Job and Community College Program.

Job and Community College Program Relationship	1971		1970	
	Number	Percent	Number	Percent
Directly Related	1141	28.2	710	24.4
Somewhat Related	1092	27.0	822	28.3
Not Related	1814	44.8	1378	47.3
Total	4047	100.0	2910	100.0

Transfer

Although 67 percent of the respondents exited in a transfer curriculum, only 38.2 percent actually transferred to another educational institution. Results of the nonrespondent survey show that for each of the seven colleges completing the survey, the distribution of nonrespondents was within the 10 percent acceptance limits of the respondent distribution. Table 33 shows the diversity of educational institutions to which community college students transferred.

TABLE 33. Distribution of Respondents by Type of Institution to Which They Subsequently Transferred.

Transfer Institution Type	1971		1970	
	Number	Percent	Number	Percent
Another Maryland Community College	53	2.5	107	5.6
A Maryland State College	566	26.2	450	23.5
The University of Maryland	632	29.1	541	28.3
A Maryland Private Four-Year	169	7.8	171	8.9
A Maryland Private Two-Year	6	0.3	61	3.2
A Maryland Technical or Commercial	48	2.2	80	4.2
A Non-Maryland Public Four-Year	299	13.8	262	13.7
A Non-Maryland Private Four-Year	226	10.5	174	9.1
A Non-Maryland Public Two-Year	71	3.3	66	3.5
A Non-Maryland Private Two-Year	82	3.8	-	-
A Non-Maryland Technical or Commercial	10	0.5	-	-
Total	2162	100.0	1912	100.0

Those respondents who transferred indicated little difficulty in maintaining good academic standing with only 4.3 percent reporting less than a 2.00 cumulative grade-point average (Table 34). Further, respondents are not indicating large losses of credit hours earned upon transfer; 16.3 percent have indicated credit hour losses greater than the equivalent of two or more courses, i.e., more than six credit hours (Table 35). A large part of these losses can be attributed to a change in major, nonacceptance of "D" grades, etc.

TABLE 34. Distribution of Respondents by Cumulative Grade-Point Average at the Transfer Institution.

Cumulative Grade-Point Average	1971 Number	1971 Percent	1970 Number	1970 Percent
Less than 2.0	210	4.3	91	5.4
2.00 - 2.40	392	15.3	294	17.3
2.50 - 2.90	805	31.4	531	31.2
3.00 - 3.40	822	32.1	536	31.5
3.50 - Above	433	16.9	250	14.6
Total	2562	100.0	1702	100.0

TABLE 35. Distribution of Respondents by Number of Credit Hours Lost upon Transfer.

Credit Hours Lost	1971 Number	1971 Percent	1970 Number	1970 Percent
None	1042	49.6	931	49.2
1 - 3	461	22.0	457	24.2
4 - 6	255	12.1	208	11.0
7 - 12	187	8.9	168	8.9
13 - 20	91	4.3	79	4.2
21 or More	65	3.1	49	2.5
Total	2101	100.0	1892	100.0

An investigation of the crosstabulation of credit hour losses and type of transfer institution does not indicate that the 16.3 percent who experienced credit hour losses of more than six credit hours are attending any particular type of transfer institution (Table 36).

TABLE 36. Crosstabulation of Loss of Credit Hours upon Transfer by Type of Transfer Institution.

Transfer Institution	Credit Hours Lost: None 1971	None 1970	1 - 3 1971	1 - 3 1970	4 - 6 1971	4 - 6 1970	7 - 12 1971	7 - 12 1970	13 - 20 1971	13 - 20 1970	21 or More 1971	21 or More 1970	Total 1971	Total 1970
Another Maryland Community College	34	61	6	18	2	3	-	3	-	2	2	1	44	88
A Maryland State College	306	231	112	102	59	48	37	33	15	11	10	8	539	433
The University of Maryland	231	172	162	145	89	87	71	75	37	34	10	13	600	526
A Maryland Private Four-Year	83	98	28	33	24	7	14	13	6	9	5	5	160	165
A Maryland Private Two-Year	2	41	1	15	-	-	1	1	-	1	-	1	4	59
A Maryland Technical or Commercial	14	35	1	11	1	1	-	2	3	1	2	4	21	54
A Non-Maryland Public Four-Year	130	115	62	67	33	29	28	22	15	10	12	8	280	251
A Non-Maryland Private Four-Year	106	84	44	33	29	23	20	11	8	9	7	3	214	163
A Non-Maryland Public Two-Year	31	44	16	9	2	4	5	2	1	-	4	-	59	59
A Non-Maryland Private Two-Year	41	-	8	-	7	-	1	-	2	-	6	-	65	-
A Non-Maryland Technical or Commercial	2	-	-	-	-	-	-	-	-	-	1	-	3	-
Total	980	881	440	433	246	202	177	162	87	77	59	43	1989	1798

Table 37 shows the crosstabulation of race and type of transfer institution. A larger number of the black students who transferred chose a Maryland State college. This is understandable since the Community College of Baltimore has a majority black enrollment and is within commuting distance of three State colleges.

TABLE 37. Crosstabulation of Race and Type of Transfer Institution.

	Race													
	White		Black		Oriental		Spanish Surnamed		American Indian		Other		Total	
Transfer Institution	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970
Another Maryland Community College	45	74	6	10	-	1	-	1	-	-	-	1	51	87
A Maryland State College	491	356	58	41	2	4	2	2	1	3	2	6	556	412
The University of Maryland	581	480	28	11	6	4	2	3	1	-	5	6	623	504
A Maryland Private Four-Year	149	121	9	13	-	3	1	1	-	1	5	2	164	141
A Maryland Private Two-Year	4	17	1	2	-	2	-	3	-	-	-	-	5	24
A Maryland Technical or Commercial	42	38	6	5	-	1	-	4	-	1	-	-	48	49
A Non-Maryland Public Four-Year	265	207	18	18	2	3	1	3	1	-	2	4	289	235
A Non-Maryland Private Four-Year	206	127	8	8	5	3	2	3	-	1	2	3	223	145
A Non-Maryland Public Two-Year	66	30	1	4	-	4	-	2	-	2	1	1	68	43
A Non-Maryland Private Two-Year	66	-	10	-	-	-	1	-	-	-	1	-	78	-
A Non-Maryland Technical or Commercial	8	-	2	-	-	-	-	-	-	-	-	-	10	-
Total	1923	1450	147	112	15	25	9	22	3	8	18	23	2115	1640

Community college program of study was reported as being either "directly" (48.1 percent) or "somewhat" related (35.8 percent) to courses in the transfer institution by over 83 percent of the respondents. Similarly, respondents indicated that their community college prepared them either "extremely well" (32.1 percent) or "satisfactorily" (59.4 percent) for further academic work.

College Environment

When asked if they would recommend their community college program of study to a friend, 73.8 percent responded yes. Results of the nonrespondent survey show four of the colleges with nonrespondent distribution within the acceptance limits of the respondent distribution. The other three colleges found their nonrespondents to be higher in the percent who would recommend their program of study than the respondents. More than 83 percent of the respondents indicated that they would recommend their community college to a friend.

TABLE 38. Distribution of Respondents by Recommendation of Community College Program.

Recommended Program	1971 Number	1971 Percent
Yes	4039	73.8
No	455	8.3
Uncertain	978	17.9
Total	5472	100.0

TABLE 39. Distribution of Respondents by Recommendation of Community College.

Recommended College	1971 Number	1971 Percent
Yes	4582	83.6
No	255	4.7
Uncertain	643	11.7
Total	5480	100.0

FURTHER RESEARCH

This study will be replicated for those students entering in Fall 1972. After the completion of the 1972 Follow-Up Study, a decision will be made whether to continue the study annually or to begin administering the study on a cyclical basis.

APPENDIX A

PARTICIPATING COLLEGES

Allegany Community College

Anne Arundel Community College

Community College of Baltimore

Catonsville Community College

Cecil Community College

Charles County Community College

Dundalk Community College

Essex Community College

Frederick Community College

Garrett Community College

Hagerstown Junior College

Harford Community College

Howard Community College

Montgomery Community College

Prince George's Community College

APPENDIX B

PROCEDURE FOR SEQUENTIAL SAMPLING

1. Identify a list or file of nonrespondents (NR's), excluding "addressee unknowns." Number each NR on the list from 1 to n.

2. Prepare a "Cumulative Percent Yes" sheet for each of the 4 yes-no items that you will ask the NR's.

   a. Draw a solid line to represent the unadjusted percent yes for that item among the respondents from the 1971 follow-up. See attached example.

   b. Decide what percent error you are willing to tolerate and draw dashed lines corresponding to that tolerance above and below the percent yes among the respondents; + or - 10% is suggested. See example.

3. Randomly select one NR, using the table of random numbers or other random scheme.

4. Telephone the NR and follow the Nonrespondent Interview Form. If the NR is not home or has moved, call later or get new number. (Do not take answers from anyone other than the NR.) If you reach a complete dead end, discard the NR and select a new one. Assign the new NR the same trial number that the discarded NR had.

5. Record the NR answers on the proper "Cumulative Percent Yes" sheets, line a. Put "1" for yes and "-" for a no or other response. Put the cumulative number yes on line b. Compute the cumulative percent yes by dividing line b by line c. Enter this on line d. Plot the cumulative percent yes. See example.

6. Continue selecting NR's as in step 3. After about 30 trials, check each graph to see if the cumulative percent yes is beginning to stabilize (level off). If it stabilizes at or inside your error tolerance, you conclude that your NR's are similar to your respondents on that item. If the cumulative percent yes stabilizes outside your error tolerance limits, your NR's are apparently different than your respondents on that item. If the graph is still climbing or falling, keep calling NR's until the graph levels off.

7. This is a practical test and not a hard statistical one. However, you could do a chi-square test with this data to test for differences between respondents and nonrespondents. You could also check the sampling bias to find the probability that your sample of NR's truly represents the NR group.

JDT/rk Maryland Community College Research Group 7/16/75

NONRESPONDENT INTERVIEW FORM

COLLEGE _____ TRIAL NO. _____

TELEPHONE NO. _____ NAME _____

Hello, my name is _____ *from* _____ *College. Is this* _____*? (If not the nonrespondent, ask when or where the person can be reached.) We are doing a survey to assess our programs at the college. There are only six questions.*

C. What was the type of program you pursued in high school? (circle one)

1. College Parallel
2. Agriculture
3. Distributive Education
4. Health Occupations
5. Home Economics
6. Business and Office Education
7. Industrial Arts
8. Technical Education
9. Trade and Industrial Occupations

E. What was your primary purpose for attending this community college? Would you say it was: (read each and circle one)

1. To obtain an A.A. degree with plans to transfer.
2. To obtain an A.A. degree with plans for immediate employment.
3. To obtain a certificate or diploma to upgrade or improve skills.
4. To obtain training in a special program.
5. To take some college level courses before transferring.
6. To take one or several courses of special interest.

F. Was your primary purpose just indicated achieved by the time you left this community college? (circle one)

1. Yes 2. No

K. Would you recommend to a friend your program of study in this community college? Would you say: (read each and circle one)

1. Yes 2. No 3. Uncertain

N. Were you employed either full- or part-time during March 1975? (circle one)

1. Yes 2. No

V. Have you attended another college as a transfer student at any time since you left _____ College? (circle one)

1. Yes 2. No

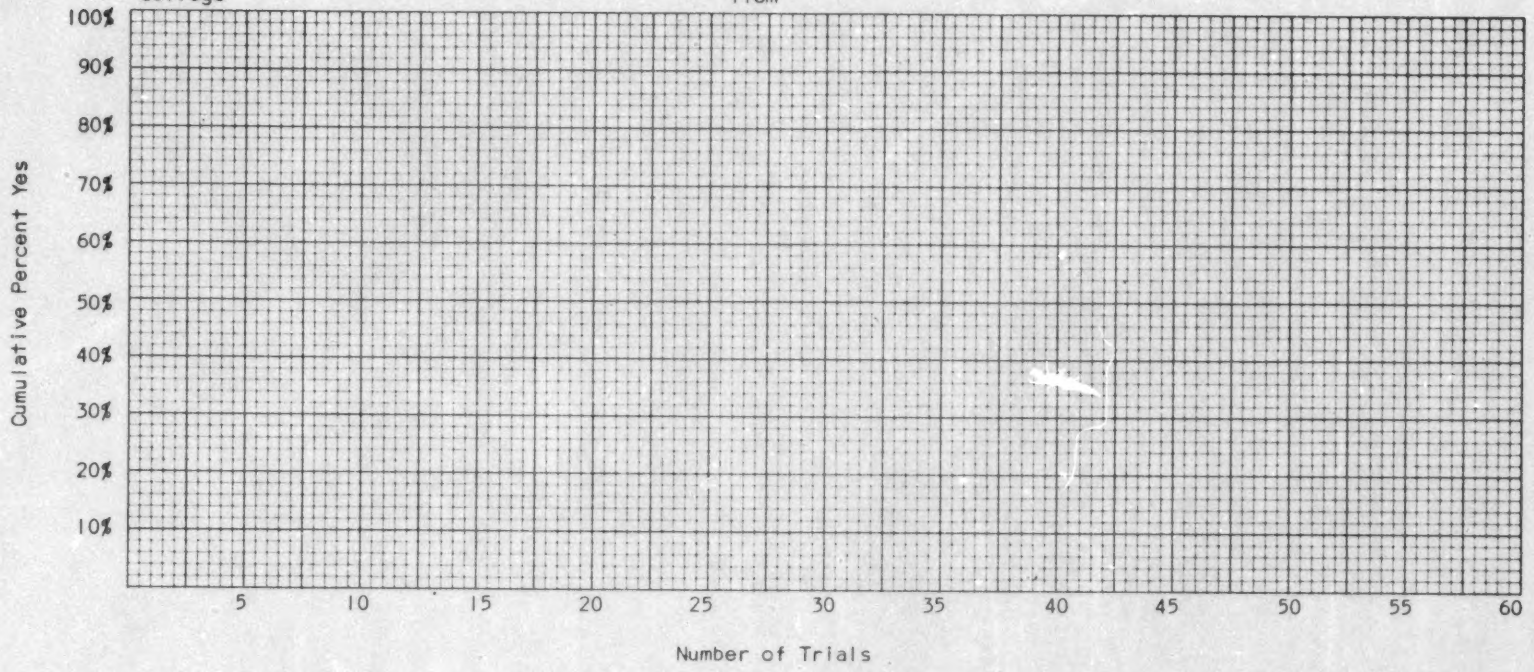
Thank you for your help!

JDT/rk Maryland Community College Research Group 7/16/75

CUMULATIVE PERCENT YES -- SEQUENTIAL SAMPLING OF NON-RESPONDENTS

College

Item

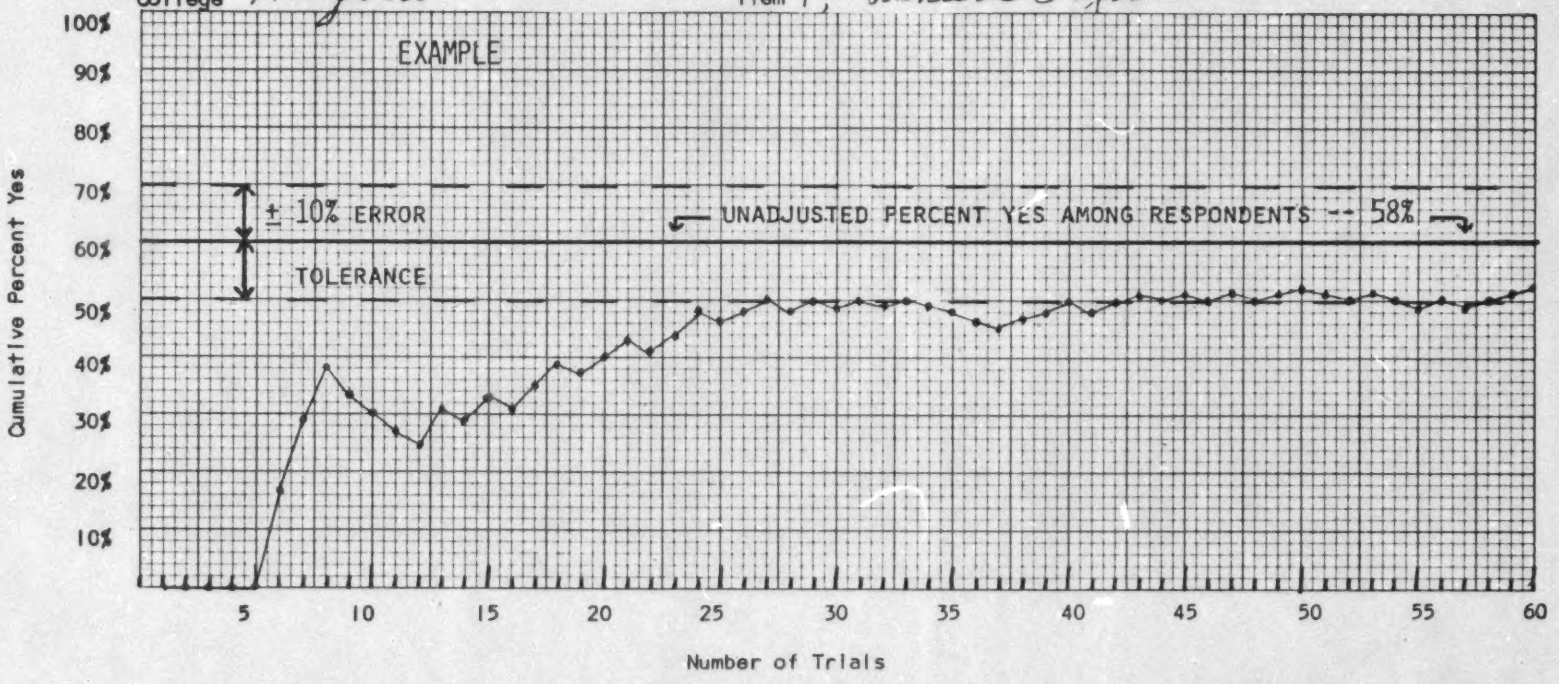


a. Answer (yes=1) b. Cum. # yes c. Trial # d. Cum. % yes																																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
a. Answer (yes=1) b. Cum. # yes c. Trial # d. Cum. % yes																																
	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60

MCCRG JDT/rk 7/24/75

CUMULATIVE PERCENT YES -- SEQUENTIAL SAMPLING OF NON-RESPONDENTS

College Harford Item F, Achieve Objective?



| | | |

MARYLAND PUBLIC COMMUNITY COLLEGES
STUDENT FOLLOW-UP STUDY
QUESTIONNAIRE

APPENDIX C

Maryland's Public Community Colleges
Maryland State Board for Community Colleges

Dear Student:

Originally the purpose of Community Colleges in Maryland, as in other states, was to provide the first two years of a baccalaureate program. Over the years, however, they have become more comprehensive in the scope of their curricular offerings. Therefore, in order that we may assess how well these programs are serving the Maryland public, we ask you to complete this questionnaire.

For your convenience a preaddressed and stamped return envelope is enclosed.

Thank you for your assistance and cooperation.

Sincerely yours,

Alfred C. O'Connell
Executive Director
Maryland State Board for Community Colleges

PART I. GENERAL INFORMATION

A. Indicate to which one of the following groups you consider yourself belonging.

1. White
2. Black
3. Oriental
4. Spanish Surnamed American
5. American Indian
6. Other (specify) _____

B. Please indicate your year of high school graduation _____ (year) or the year you acquired the high school equivalency diploma _____ (year of GED).

C. Please indicate the type of program you pursued in high school.

1. College parallel
2. Agriculture
3. Distributive Education
4. Health Occupations
5. Home Economics
6. Business & Office Education
7. Industrial Arts
8. Technical Education
9. Trade & Industrial Occupations

D. Please indicate the geographic location of your high school.

1. Same county/city as this community college
2. Other Maryland county
3. An out-of-state county

Continued on next page

PART II. EDUCATIONAL GOALS UPON ENTRY TO THIS COMMUNITY COLLEGE (All students please respond to these items.)

E. Please circle your one primary purpose for first attending this community college.

1. To obtain an A.A. degree with plans to transfer
2. To obtain an A.A. degree with plans for immediate employment
3. To obtain a certificate or diploma to upgrade or improve skills
4. To obtain training in a special program
5. To take some college level courses before transferring
6. To take one or several courses of special interest

F. Was your primary purpose, indicated above, achieved by the time you left this community college?

1. Yes 2. No (If you respond No, please answer G and H otherwise proceed to I.)

G. Please indicate your intentions toward accomplishing your purpose stated in (E) above.

1. No further plans
2. Still pursuing
3. Hope to continue pursuit at a later date

H. What primary reason(s) made you decide to discontinue attendance at this community college? (If more than one reason applies circle the two or three most important reasons.)

1. Transferred
2. Employment
3. Personal
4. Marriage
5. Lack of interest
6. Entered military service
7. Lack of financial support
8. Moved to another area
9. Change in educational goal
10. Dissatisfaction with this college

I. Did you attend this community college primarily on a part-time or full-time basis (Part-time — less than 12 credit hours per term; full-time — 12 or more credit hours per term.)

1. Part-time 2. Full-time

J. The following items describe aspects and services of this community college. In the appropriate space to the right of each statement would you please check the degree to which you were satisfied?

	No Experience With item	Highly Dissatisfied				Highly Satisfied
		1	2	3	4	5	6
Overall quality of instruction	☐	☐	☐	☐	☐	☐	☐
Faculty availability after class	☐	☐	☐	☐	☐	☐	☐
Faculty interest in students	☐	☐	☐	☐	☐	☐	☐
Freshman orientation program	☐	☐	☐	☐	☐	☐	☐
Availability of cultural programs	☐	☐	☐	☐	☐	☐	☐
Assistance finding employment	☐	☐	☐	☐	☐	☐	☐
Counseling for course selection	☐	☐	☐	☐	☐	☐	☐
Counseling for personal problem(s)	☐	☐	☐	☐	☐	☐	☐
Overall college facilities	☐	☐	☐	☐	☐	☐	☐
Facilities in my college program	☐	☐	☐	☐	☐	☐	☐
Student-faculty relationships	☐	☐	☐	☐	☐	☐	☐
Student relationships	☐	☐	☐	☐	☐	☐	☐
Student influence in college decisions	☐	☐	☐	☐	☐	☐	☐
Variety of student extracurricular activities	☐	☐	☐	☐	☐	☐	☐
Variety of student organizations	☐	☐	☐	☐	☐	☐	☐
Academic atmosphere	☐	☐	☐	☐	☐	☐	☐
Overall college atmosphere	☐	☐	☐	☐	☐	☐	☐

K. Would you recommend to a friend your program of study at this community college?

1. Yes 2. No 3. Uncertain

L. Would you recommend this college to a friend?

1. Yes 2. No 3. Uncertain

PART III.

CURRENTLY EMPLOYED FORMER STUDENTS (All students who are now employed, even if you transferred to another institution, should respond to these questions.)

M. Indicate the geographic location in which you are presently employed.

1. The same county/city as this community college
2. Other county in Maryland
3. Baltimore City
4. Washington, D.C.
5. Delaware
6. Pennsylvania
7. Virginia
8. West Virginia
9. Other out-of-town location

Continued on next page

N. What is your current employment status?

1. Part-time 2. Full-time

O. Have you changed jobs between the time you left this community college and March, 1975?

1. Yes 2. No

P. How long have you been employed in your present job?

1. Less than 1 year
2. 1-2 years
3. 3-5 years
4. 6-10 years
5. 11 years or more

Q. Please indicate both your initial employment yearly salary upon leaving this community college and your present employment yearly salary.

Initial Salary: $_____

Present Salary: $_____

R. How did you locate your first job after leaving this community college?

1. Faculty at this college
2. This community college's placement office
3. Employment agency
4. Family or friend
5. Newspaper
6. Held same job while attending this college
7. Other

S. Indicate the most accurate relationship between your program at this community college and your job.

1. Program directly related to job
2. Program somewhat related to job
3. Program not at all related to job

Please rate your satisfaction with your present job.

	Highly Dissatisfied				Highly Satisfied
	1	2	3	4	5
Salary	☐	☐	☐	☐	☐
Opportunities for salary increases	☐	☐	☐	☐	☐
Opportunities for advancement	☐	☐	☐	☐	☐
Job enjoyment	☐	☐	☐	☐	☐
Fringe benefits	☐	☐	☐	☐	☐
Job importance to you	☐	☐	☐	☐	☐
Communication with superiors	☐	☐	☐	☐	☐

T. Did your educational program at this community college assist you in:

	Yes 1	No 2	Not Applicable 3
Increasing your theoretical understanding of skills required for your job	☐	☐	☐
Increasing your abilities to perform skills required by your job	☐	☐	☐
Obtaining your job	☐	☐	☐
Obtaining salary increases and/or promotions	☐	☐	☐

U. Would you please list the following information about your current employment.

1. Job title _____

_____

2. Name and address of employer (Voluntary)_____

_____

_____

_____

3. Can employer be contacted?

☐ YES ☐ NO

PART IV.

FOR FORMER STUDENTS WHO HAVE SINCE TRANSFERRED TO ANOTHER EDUCATIONAL INSTITUTION (Please use the first institution to which you transferred since leaving this community college as your reference in responding to these items.)

V. Immediately after leaving this community college, please indicate the type of institution to which you transferred.

1. Another Maryland public community college
2. A public State college in Maryland
3. The University of Maryland
4. Maryland private four-year college or university
5. A private two-year Maryland college
6. Maryland technical or commercial school
7. Out-of-state four-year public college or university
8. Out-of-state four-year private college or university
9. Out-of-state two-year public college
10. Out-of-state two-year private college
11. Out-of-state technical or commercial school

W. When you enrolled in the institution indicated in (V) above, circle your present enrollment status.

1. Part-time
2. Full-time

X. Please indicate your enrollment classification when you enrolled in the institution indicated in (V) above.

1. Freshman
2. Sophomore
3. Junior
4. Senior
5. Graduate student

Continued on next page

Y. Check your overall grade point average at the institution in (V) above based on a 4-point scale.

(1.) less than 2.0
(2.) 2.0 - 2.4
(3.) 2.5 - 2.9
(4.) 3.0 - 3.4
(5.) 3.5 and over

Z. To what extent was your curriculum program at this community college related to your major at the institution indicated in (V) above?

1. Directly related
2. Somewhat related
3. Not related

AA. Please check the degree of satisfaction to which you feel this community college prepared you for additional academic work?

1. Extremely satisfactorily
2. Satisfactorily
3. Unsatisfactorily

BB. How many credit hours earned at this community college were not accepted at the institution indicated in (V) above?

1. All credit hours accepted
2. Lost 1-3 credit hours
3. Lost 4-6 credit hours
4. Lost 7-12 credit hours
5. Lost 13-20 credit hours
6. Lost more than 21 credit hours

THANK YOU FOR YOUR CONTINUED INTEREST IN MARYLAND'S COMMUNITY COLLEGES

MARYLAND COMMUNITY COLLEGES

Allegany Community College
Cumberland
W. Ardell Haines, President

Anne Arundel Community College
Arnold
Robert P. Ludlum, President

Community College of Baltimore
Baltimore City
Harry Bard, President

Catonsville Community College
Baltimore County
B. A. Barringer, President

Cecil Community College
North East
William J. O'Connor, President

Charles County Community College
La Plata
J. N. Carsey, President

Chesapeake College
Wye Mills
Harold D. Jopp, Jr.,
Interim President

Dundalk Community College
Baltimore County
John E. Ravekes, President

Essex Community College
Baltimore County
Vernon Wanty, President

Frederick Community College
Frederick
Lewis W. Stephens, President

Garrett Community College
McHenry
Alfred C. O'Connell, President

Hagerstown Junior College
Hagerstown
Atlee C. Kepler, President

Harford Community College
Bel Air
Kenneth W. Oosting, President

Howard Community College
Columbia
Alfred J. Smith, Jr., President

Montgomery Community College
Rockville and Takoma Park
William C. Strasser, President

Prince George's Community College
Largo
Robert I. Bickford, President

UNIVERSITY OF CALIF.
LOS ANGELES

JAN 23 1976

CLEARINGHOUSE FOR
JUNIOR COLLEGE